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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,312	10/27/2003	Leonid Isaakovich Rubinstein	TH-1905 (US)	3553

7590 05/27/2005

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EXAMINER
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OWENS, AMELIA A

ART UNIT	PAPER NUMBER
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1625

DATE MAILED: 05/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/694,312

Applicant(s)

RUBINSTEIN, LEONID  
ISAAKOVICH

Examiner

Amelia A. Owens

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29, 34-35 is/are rejected.
- 7) ☒ Claim(s) 30-33 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

Claims 1-35 are pending. Drawings, 1 sheet, were filed with the application. Foreign priority was not claimed.

***Information Disclosure Statement***

The examiner has considered the IDS.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-29, 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pitchai et al USP 5,686,380 taken with Monnier USP 5,081,096.

Pitchai et al '380 teach a silver calcium carbonate catalyst with a potassium promoter used in epoxidation processes. The reference teaches type of carbonate material to which the silver is bonded; the surface area calculated using BET; the amount of silver present; the benefit of a potassium promoter; the amount of promoter present. See column 2 lines 21-62; column 3 lines 10-63; column 6 lines 27-65; column 8 lines 3-14.. The difference is that the promoter is potassium and not rubidium as instantly claimed; and the amount of promoter present.

Monnier et al '096 teach epoxidation catalyst comprised of silver on a support (carrier) containing a promoter such as rubidium. See column 2 line 20 thru column 3 line 58; column 4 lines 7-19; column 4 line 38 thru column 5 line 9. The catalyst surface area is calculated using

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BET standard form as are applicants'. Monnier '096 teach the equivalence of potassium and rubidium as promoters for silver catalysts. See abstract.

One of ordinary skill in the art would be motivated to replace the promoter of Pitchai '380 with the promoter of Monnier '096 given the equivalency teaching of potassium and rubidium as promoters in Monnier '096. Proportions of ingredients, to impart patentability to an otherwise obvious chemical composition, must produce more than a mere difference in degree in the properties of the composition. The catalyst would be expected to work in epoxidation processes. The claimed catalyst has not been demonstrated to be superior to the catalyst of the prior art in epoxidation processes. It would be well within the purview of the skilled artisan to determine the amount of rubidium promoter to make an effective catalyst. Further, crush strength is seen to be an inherent property of the silver calcium carbonate catalyst. Describing how the alumina support is made is not seen to impart patentability given that such alpha-alumina carriers are well known in the catalyst art. No unobvious or unexpected results are noted.

*Claims 30-33 are not included as the references do not teach the additional organic chloride and NOx promoters.*

Claims 30-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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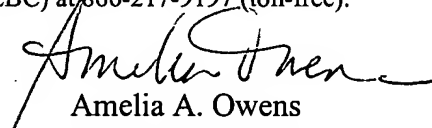
Claim 35 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term 'derivative' is ambiguous since derivative is referring to material "derived" from the named product while applicants are claiming a particular product – propylene oxide. It is suggested that the particular product be named properly.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amelia A. Owens whose telephone number is 571-272-0690. The examiner can normally be reached on Monday - Friday from 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang can be reached on 571-272-0562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Amelia A. Owens  
Primary Examiner  
Art Unit 1625